CATALOG DOCUMENTATION
NATIONAL COASTAL ASSESSMENT DATABASE
2003 NEW YORK/NEW JERSEY HARBOR SYSTEM
STATION LOCATION AND VISIT INFORMATION

TABLE OF CONTENTS

1. DATA SET IDENTIFICATION

1.1 Title of Catalog document

National Coastal Assessment Database
2003 New York/New Jersey Harbor System
Station Location and Sampling Visit Information

1.2 Author of the Catalog entry

Melissa Hughes, Raytheon

1.3 Catalog revision date

June 12, 2012

1.4 Data set name

Station Location and Sampling Visit Information

1.5 Task Group

Regional Environmental Monitoring and Assessment Program

1.6 Data set identification code

NA

1.7 Version

NA

1.8 Requested Acknowledgment

If you plan to publish these data in any way, EPA requires a standard statement for work it has supported: "Although the data described in this article have been funded wholly or in part by the U. S. Environmental Protection Agency through its EMAP-Estuaries Program, it has not been subjected to Agency review, and therefore does not necessarily reflect the views of the Agency and no official endorsement should be inferred."

2. INVESTIGATOR INFORMATION

2.1 Principal Investigator

Ms. Darvene A. Adams
U.S. Environmental Protection Agency - Region II

2.2. Investigation Participant

Ms. Sandi Robinson
U.S. Environmental Protection Agency - ORD/NHEERL/AED

3. DATA SET ABSTRACT

3.1 Abstract of the Data Set

The Station Location and Sampling Visit data sets provide geographic and visit information on the sites sampled in the New York/New Jersey Harbor region. The latitude and longitude for each station are given, as well as the area represented by a station. The water column depth at the time of sampling is reported. Most stations were selected probabilistically using a stratified random design; other stations were specifically located in a depositional area.

3.2 Keywords for the Data Set

sampling sites, latitude, longitude, depth

4. OBJECTIVES AND INTRODUCTION

4.1 Program Objective

The project was designed to support resource management decisions related to pollution control and remediation throughout the New York/New Jersey (NY/NJ) Harbor and to assist the New York-New Jersey Harbor Estuary Program (HEP) in developing a contaminant monitoring strategy to be included in the Comprehensive Conservation and Management Plan (CCMP) for the NY/NJ Harbor system.

4.2 Data Set Objective

To provide accurate station location and visit information for each site visited in the NY/NJ harbor region.

4.3 Data Set Background Discussion

The New York/New Jersey Harbor System Sediment Assessment was based on methods used in the EMAP-Estuaries program. A probability-based sampling design ensured an unbiased estimation of condition and that all areas within the system were potentially subject to sampling. The probability based sampling design also allowed calculation of confidence limits around estimates of condition.

4.4 Summary of Data Set Parameters

Station Location and Sampling Visit data set values were based on the geographic location of the station and other observations recorded at the time of the visit.

5. DATA ACQUISITION AND PROCESSING METHODS

5.1 Data Acquisition

5.1.1 Sampling Objective

Accurately locate sampling sites, measure depth of water column

5.1.2 Sample Collection Methods Summary

One hundred and thirteen sites were sampled, 28 in each of 3

sub-basins, Jamaica Bay, Raritan Bay and Upper Harbor and 29 in Newark Bay. All stations were sampled in 2003. Sites not in a depositional area were selected by randomly placing a grid structure over the study area, selecting 14 grid cells at random from each stratum, and selecting a random location from within the selected cells. Cells were of equal area within strata.

5.1.3 Sampling Start Date
July 1, 2003

5.1.4 Sampling End Date
September 25, 2003

5.1.5 Platform
Sampling was conducted from the USEPA vessel, the R/V CLEAN WATERS.

5.1.6 Sampling Gear
LORAN-C
Differential-GPS (D-GPS)
Global Positioning System (GPS)
sonar

5.1.7 Manufacturer of Sampling Equipment
NA

5.1.8 Key Variables
The latitude and longitude of the station location were determined at the time of sampling. According to EPA Locational Policy: 1. Latitude is always presented before longitude; 2. Latitude and longitude are recorded as decimal degrees. The specific method, Loran or GPS, of determining the latitude and longitude is also recorded.

5.1.9 Collection Method Calibration
NA

5.1.10 Sample Collection Quality Control
NA

5.1.11 Sample Collection Method Reference
Overton, W.S., D. White and D.L. Stevens. 1990. Design Report for EMAP: Environmental Monitoring and Assessment Program. EPA/600/3-91/053. U.S. Environmental Protection Agency, ORD, Washington, DC.

5.2 Data Preparation and Sample Processing
Not applicable

6. DATA MANIPULATIONS
Most values were assigned, based on geographic location.

6.1 Name of new or modified values
NA

6.2 Data Manipulation Description
NA

6.3 Data Manipulation Examples
Not applicable.

7. DATA DESCRIPTION

7.1 Description of Parameters

7.1.1 Station Location

Attribute Name	Format	Description
Province	VARCHAR2(4)	Large biogeographic sampling area
Resource Name	VARCHAR2(20)	Program conducting sampling
Data Group	VARCHAR2(4)	Data group conducting sampling
Sampling Year	NUMBER(4.0)	Data collection year
EPA Region	VARCHAR2(2)	EPA region code
State	VARCHAR2(2)	Code for state
Water Body System	VARCHAR2(6)	Large water body
Estuary Name	VARCHAR2(50)	Small water body
Station Name	VARCHAR2(20)	The station identifier
Latitude Decimal Degrees	NUMBER(9.3)	Decimal degrees of latitude
Longitude Decimal Degrees	NUMBER(9.3)	Decimal degrees (-) of longitude
Station Statistical Area	NUMBER(7.2)	Station statistical area (sq. km.)
Water Body Strata	VARCHAR2(6)	Design Strata: Depositional area
Sample Collection Code	VARCHAR2(18)	Station class code-sampling regime
Local Station Name	VARCHAR2(20)	Local station name

7.1.2 Sampling Visit

Attribute Name	Format	Description
Data Group	VARCHAR2(4)	Data group conducting sampling
Sampling Year	NUMBER(4.0)	Data collection year
Station Name	VARCHAR2(20)	The station identifier
Sampling Collection Date	DATE	Date of sample collection
Latitude Decimal Degrees	NUMBER(9.3)	Decimal degrees of latitude
Longitude Decimal Degrees	NUMBER(9.3)	Decimal degrees (-) of longitude
Visit Number	NUMBER(2.0)	Number of visit to this station
Station Depth	NUMBER(5.1)	Water depth at time of sampling
Depth Units	VARCHAR2(15)	Units of depth

7.1.6 Precision to which values are reported

The precision is indicated by the attribute format reported under 7.1

7.1.7 Minimum value in data set

Latitude decimal degrees	40.426
Longitude decimal degrees	-74.298
Station depth	1.7

7.1.8 Maximum value in Data Set

Latitude decimal degrees	40.867
Longitude decimal degrees	-73.759
Station depth	25.3

7.2 Data Record Example

7.2.1 Column Names for Example Records

7.2.1.1 Station Location

Province,Resource Name,Data Group,Sampling Year,EPA Region,State,
Water Body System,Estuary Name,Station Name,Latitude Decimal Degrees,

Longitude Decimal Degrees,Station Statistical Area (sq km),
Water Body Strata,Station Class,Local Station Name

7.2.1.2 Sampling Visit
Data Group,Sampling Year,Station Name,Sampling Collection Date,
Latitude Decimal Degrees,Longitude Decimal Degrees,Visit Number,
Station Depth,Depth Units

7.2.2 Example Data Records
7.2.2.1 Station Location
Virginian,Estuaries,R-EMAP Region 2 2003,2003,2,New York,
New York/New Jersey Harbor,Jamaica Bay,JB301,40.629,-73.759,,,,
Virginian,Estuaries,R-EMAP Region 2 2003,2003,2,New York,
New York/New Jersey Harbor,Jamaica Bay,JB303,40.619,-73.778,,,,
Virginian,Estuaries,R-EMAP Region 2 2003,2003,2,New York,
New York/New Jersey Harbor,Jamaica Bay,JB305,40.575,-73.87,,,,

7.2.2.2 Sampling Visit
R-EMAP Region 2 2003,2003,JB301,7/31/2003,40.629,-73.759,1,9.5,m
R-EMAP Region 2 2003,2003,JB301,8/1/2003,40.629,-73.759,2,9.5,m
R-EMAP Region 2 2003,2003,JB303,8/8/2003,40.619,-73.778,1,10.7,m

8. GEOGRAPHIC AND SPATIAL INFORMATION

8.1 Minimum Longitude
-74 Degrees 17.4 Minutes 48.00 Decimal Seconds

8.2 Maximum Longitude
-73 Degrees 45 Minutes 0.54 Decimal Seconds

8.3 Minimum Latitude
40 Degrees 25.2 Minutes 36.00 Decimal Seconds

8.4 Maximum Latitude
40 Degrees 51.6 Minutes 42.00 Decimal Seconds

8.5 Name of area or region
New York/New Jersey Harbor System:
Four sub-basins were sampled in the New York/New Jersey Harbor, including: Upper Harbor, Newark Bay, Lower Harbor (includes Raritan and Sandy Hook Bays) and Jamaica Bay. For purposes of this study, the region includes the lower portions of the Hudson, Passaic, Harlem, Hackensack and Raritan Rivers, upstream to a near-bottom salinity of 15 ppt, the East River to Long Island Sound and Lower Harbor to the Atlantic Ocean.

9. QUALITY CONTROL AND QUALITY ASSURANCE

9.1 Data Quality Objectives
NA

9.2 Data Quality Assurance Procedures
NA

10. DATA ACCESS

10.1 Data Access Procedures
Data can be downloaded from the WWW server.

10.2 Data Access Restrictions
Data can only be accessed from the WWW server.

10.3 Data Access Contact Persons
Ms. Darvene A. Adams
U.S. EPA Region II

10.4 Data Set Format
Tab-delimited

10.5 Information Concerning Anonymous FTP
Data cannot be accessed via ftp.

10.6 Information Concerning WWW
Data can be downloaded from the WWW servers.

10.7 EMAP CD-ROM Containing the Data Set
Data are not available on CD-ROM

11. REFERENCES

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12. TABLE OF ACRONYMS

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